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In a final Office Action dated February 23, 2006, the Examiner rejected claims 1-5, 10-14, 18-24, 27-30, 33, and 34 under 35 U.S.C. §102(e) as being anticipated by Mesecher et al. (U.S. patent no. 6,574,271, hereinafter referred to as "Mesecher"). The Examiner objected to claims 25, 26, 31, and 32 as being dependent upon a rejected base claim but as being allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. The rejections are traversed and reconsideration is hereby respectfully requested.

The Examiner rejected claims 1-5, 10-14, 18-24, 27-30, 33, and 34 under 35 U.S.C. §102(e) as being anticipated by Mesecher. Specifically, with respect to claim 1, the Examiner contended that Mesecher teaches a method for allocating a shared communication channel among multiple beams in a communication system comprising a switched beam antenna system, wherein the shared communication channel comprises multiple orthogonal codes (col. 3, lines 20-35) and wherein the method includes measuring a quality of a propagation channel associated with each beam of the multiple beams (col. 3, lines 35-45) and allocating a first portion of the multiple orthogonal codes to a first beam of the multiple beams and a second portion of the multiple orthogonal codes to a second beam of the multiple beams, wherein the first and second portions are a function of the measured quality of the propagation channels between a base station and mobile stations in the first beam and between the base station and mobile stations in the second beam (FIG. 14; col. 6, lines 1-6). The applicant respectfully disagrees.

Mesecher teaches a determination of weights for each version of a multi-path received signal based on error signals associated with pilots that are received via each of the multiple paths. Mesecher nowhere discusses any method for allocating orthogonal codes among beams other than to note that pilot channels and traffic channels may be "sent using orthogonal spreading codes" (col. 8, lines 10-11). The only code distribution taught by Mesecher concerns pseudo-random codes, which codes are not orthogonal to each other, and the distribution pattern taught by Mesecher simply is the assignment of a different pseudo-random code to each antenna.

Furthermore, Mesecher teaches an adaptive beam steering system, not a switched beam antenna system (wherein the beams are fixed in their coverage, not adaptively steered). One may note that in an adaptive beam system, the use of channel condition feedback is irrelevant to a scheduling of users and an allocating of bandwidth. In addition, nowhere does Mesecher teach method any allocation of a shared communication channel among multiple beams, as the adaptive beams taught by Mesecher have a different channel in each beam. Therefore, Mesecher does not teach the features of claim 1 of a method for allocating a shared communication channel among multiple beams in a communication system comprising a switched beam antenna system, wherein a first portion of the multiple orthogonal codes is allocated to a first beam of multiple beams and a second portion of the multiple orthogonal codes is allocated to to a second beam of the multiple beams and wherein the first and second portions are a function of the measured quality of the propagation channels between a base station and mobile stations in the first beam and between the base station and mobile stations in the second beam. Accordingly, the applicant respectfully requests that claim 1 may now be passed to allowance.

Since claims 2-5, 10-12, and 25-29 depend upon allowable claim 1, the applicant respectfully requests that claims 2-5, 10-12 and 25-29 may now be passed to allowance.

Claim 13 teaches a base station subsystem operating in a switched beam antenna communication system that generates multiple predetermined, fixed beams and that includes a processor comprising an orthogonal code generator that generates multiple orthogonal codes, wherein multiple orthogonal codes are allocated to a shared communication channel and wherein the processor allocates a first portion of the plurality of orthogonal codes to a first array element of the multiple array elements and allocates a second portion of the plurality of orthogonal codes to a second array element of the multiple plurality of array elements, wherein the processor allocates the multiple orthogonal codes to the first and second array elements based on a propagation channel quality measurement associated with a first beam and a propagation channel quality measurement associated with a second beam of the multiple fixed beams. As described

in detail above, these features are nowhere taught by Mesecher. Accordingly, the applicant respectfully requests that claim 13 may now be passed to allowance.

Since claims 14, 18-20, 22-24 and 30-34 depend upon allowable claim 13, the applicant respectfully requests that claims 14, 18-20, 22-24 and 30-34 may now be passed to allowance.

As the applicant has overcome all substantive rejections and objections given by the Examiner and has complied with all requests properly presented by the Examiner, the applicant contends that this Response, with the above discussion, overcomes the Examiner's objections to and rejections of the pending claims. Therefore, the applicant respectfully solicits allowance of the application. If the Examiner is of the opinion that any issues regarding the status of the claims remain after this response, the Examiner is invited to contact the undersigned representative to expedite resolution of the matter.

Respectfully submitted,

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